

Title (en)  
Control System for Internal Combustion Engine

Title (de)  
Steuersystem für einen Verbrennungsmotor

Title (fr)  
Système de contrôle pour moteur à combustion interne

Publication  
**EP 2199581 A1 20100623 (EN)**

Application  
**EP 09178410 A 20091208**

Priority  
JP 2008313832 A 20081210

Abstract (en)  
A control system for an internal combustion engine having a valve operating characteristic varying device which continuously changes a lift amount of at least one intake valve. Operation of a start switch, which instructs the start of the engine is detected. The engine is started after a predetermined delay time period has elapsed from the moment the operation of the start switch is detected. The valve operating characteristic varying device is operated during the predetermined delay time period, and a failure determination of the valve operating characteristic varying device is performed.

IPC 8 full level  
**F02D 41/22** (2006.01); **F01L 13/00** (2006.01); **F02D 13/02** (2006.01); **F02D 41/04** (2006.01); **F02D 41/06** (2006.01)

CPC (source: EP US)  
**F01L 13/0063** (2013.01 - EP US); **F02D 41/042** (2013.01 - EP US); **F02D 41/062** (2013.01 - EP US); **F02D 41/221** (2013.01 - EP US); **F01L 1/185** (2013.01 - EP US); **F01L 1/34** (2013.01 - EP US); **F01L 2305/00** (2020.05 - EP US); **F01L 2800/00** (2013.01 - EP US); **F01L 2800/01** (2013.01 - EP US); **F01L 2800/11** (2013.01 - EP US); **F02D 13/0226** (2013.01 - EP US); **F02D 2200/0406** (2013.01 - EP US); **F02D 2200/703** (2013.01 - EP US)

Citation (search report)

- [XY] JP 2007077917 A 20070329 - TOYOTA MOTOR CORP
- [Y] US 2006282200 A1 20061214 - THIEL CHRISTOF [DE], et al
- [Y] US 2007073470 A1 20070329 - WATANABE SATORU [JP], et al
- [Y] US 2004107928 A1 20040610 - ASADA TOSHIAKI [JP], et al
- [A] US 2008183373 A1 20080731 - MC DONALD MIKE M [US], et al

Cited by  
EP2642107A4; EP3364001A1; CN108442993A; US10465573B2

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR

DOCDB simple family (publication)  
**EP 2199581 A1 20100623**; JP 2010138738 A 20100624; US 2010139601 A1 20100610

DOCDB simple family (application)  
**EP 09178410 A 20091208**; JP 2008313832 A 20081210; US 63357409 A 20091208